REMARKS / ARGUMENTS

Claims 1-32 are pending in the instant application. Claims 1, 11 and 21 are independent. Claims 2-10, 12-20 and 22-30 depend from independent claims 1, 11 and 21, respectively. Claims 1, 6, 10-11, 16, 20-21, 26 and 30 have been amended. The Applicant submits that support to the above amendments may be found in, for example, Applicant's Fig. 3 and the related description in paragraphs [48-49] and [52-54]. The Applicant respectfully submits that the claims define patentable subject matter.

Claims 1-7, 9, 11-17, 19, 21-27, 29 and 31-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over USP 7,042,867 ("Whitehill"), in view of USPP 2003/0112182 ("Bajikar"). Claims 8, 18 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Whitehill in view of Bajikar and further in view of USP 7,433,691 ("White"). Claims 10, 20 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Whitehill in view of Bajikar and further in view of USP 7,200,673 ("Augart"). The Applicant respectfully traverses these rejections at least based on the following amendments and remarks.

I.   Summary of Examiner Interviews

The Applicant thanks the Examiner for conducting two phone interviews with the undersigned Patent Agent for the Applicant on 10/17/2011.

More specifically, Applicant's claims 1, 6, 8 and 10 were discussed. The following is a summary of the presented arguments, which include additional arguments or amendments to the claims to address the concerns raised by the Examiner during the Interview (see substance of Interview of 10/24/2011):

(1) The Examiner in the Final Office Action equates Whitehill's mobile nodes (103) to Applicant's "network device", and Whitehill's AAA server (104) performing location analysis to mobile nodes (103) to Applicant's "identifying a location of a network device". The Examiner also equates Whitehill's AAA server (104) determining to allow or deny network access to mobile nodes (103) to Applicant's "determining, outside the network device, configuration information for said network device". In effect, the Examiner has equated Whitehill's "allow or deny network access" to Applicant's "configuration information for said network device".

The Examiner's argument is still deficient for the following reasons:

(1A) Whitehill's wireless router (102) or access points (101) are the controlling gateway for granting or denying network access to the mobile nodes (103) (the alleged "network device"). In this regard, Whitehill, at best, discloses sending the alleged "configuration information" to the wireless router (102) or access points (101), but not to the mobile nodes (103) (the alleged "network device"). In this regard, the Applicant maintains that Whitehill at least does not

disclose or suggest Applicant's "**communicating said determined configuration information to said network device**," as recited in Applicant's claim 1 (a point the Examiner also concedes in the Final Office Action).

(1B)   Even assuming that Whitehill discloses sending the alleged "configuration information" to the mobile nodes (103) (the alleged "network device") (a point the Applicant does not concede), the Examiner's argument is still deficient. Applicant's claim 1 has been amended to recite "**said determined configuration information facilitates seamless network service to said network device without denial or disconnection from the hybrid wired/wireless network**". In other words, Applicant's received "determined configuration information" facilitates or enables Applicant's network device to access the network seamlessly (without denial or disconnection from network service) when moving from one location to another location.

Whitehill, instead, discloses a method (i.e., authentication process) for **granting or denying** a network device **access to the network**, based on the determined location information of the network device.   In other words, if Whitehill's authentication process denies the mobile nodes (103) (the alleged "network device"), Whitehill's mobile nodes (103) will not be granted access and thus will be disconnected from the network. In this regard, Whitehill also does not disclose or suggest the alleged "seamless network service to said network device **without denial or disconnection from the hybrid wired/wireless network**".

(1C) Applicant's claim 1 also further distinguishes from Bajikar. Bajikar is relied upon by the Examiner to allegedly disclose the claimed "configuration information for said network device" (Whitehill's deficiency (1A)). The Examiner equates Bajikar's associating an access protocol with the current location of the mobile device to Applicant's "configuration information for said network device".

Nevertheless, Bajikar is still deficient. More specifically, Bajikar's access protocol configures whether to lock the screen saver of the mobile device (the alleged "network device"). Bajikar further discloses that the access protocol requires the mobile device (the alleged "network device") to use a password to re-autheticate for access, or to reset the device to roaming. In other words, Bajikar, discloses controlling the network access rights of the mobile device (the alleged "network device") with the access protocol (the alleged "configuration information"). In this regard, Bajikar does not disclose or suggest "facilitates seamless network service to the network device **without denial or disconnection from the hybrid wired/wireless network**," as recited in Applicant's claim 1, and accordingly it does not overcome Whitehill's deficiency (1B).

Based on the foregoing arguments, the Applicant submits that the combination of Whitehill and Bajikar does not disclose or suggest "**said determined configuration information facilitates seamless network service to said network device without denial or disconnection from the hybrid**

wired/wireless network," as recited in Applicant's claim 1. Applicant's claim 1 is submitted to be allowable.

(2) Regarding dependent claim 6, the Final Office Action relies upon Whitehill's Figs. 1 and 7, and equates Whitehill's wireless router utilizing RF channels to discover neighbor (node) to Applicant's "RF channel" being "a setup channel".

Applicant's claim 6 has been amended and now recites "said RF channel is both a **broadcast channel** and a setup channel". Whitehall fails to disclose that the wireless routers utilize a "**broadcast channel**" as the alleged "setup channel". Therefore, Applicant's dependent claim 6 is submitted to be allowable.

(3) Regarding dependent claim 8, it recites "dynamically updating the network device with the communicated information (i e, configuration of the network device in claim 1) whenever it is determined that at least one network setting corresponding to a location of said network device has changed". In other words, Applicant's "communicated information" updates only corresponds to the determined location, but cannot be equated to the "determined location".

The Final Office Action, however, seems to have incorrectly equated White's (col. 6, II. 5-28) sending the location updates to the network device to Applicant's communicated information (i.e., configuration of the network device). In other words, the Final Office Action seems to have incorrectly interpreted

Applicant's "configuration information" as a "device location". In this regard, White does not disclose or suggest the limitations as recited in Applicant's dependent claim 8, and Applicant's claim 8 should be allowable.

(4) Regarding dependent claim 10, Applicant's "ping message" is a known term of art. More specifically, the Examiner is referred to Newton's Telecom Dictionary (24th Edition) pp. 719-720, which defines a "ping" as an "echo signal response" of a packet sent from a (source) computer over a network to a computer with a specified destination IP. In other words, Applicant's "ping message" is an "echo signal response" (over the network) from a destination network routing device with a specified IP address.

The Final Office Action relies upon Augat (col. 4, ll. 56-67), and equates Augat's Time to Live (TTL) field within the probe packet for routing to Applicant's "ping message". Augat, however, discloses that the TTL field in the probe packet is a value which records the number of times the packet has "hopped" over an IP address to reach the destination. In other words, Augat's probe packet with the TTL field records the history or the routing path the packet has traversed over the network, instead of being the alleged "ping message" which bounces back as an "echo signal response" from the (destination) routing network device. In this regard, Augat at least does not disclose or suggest Applicant's "ping message", and Applicant's dependent claim 10 should be allowable.

REJECTION UNDER 35 U.S.C. § 103

Requirements For A Prima Facie Case Of Obviousness

In order for a *prima facie* case of obviousness to be established, the Manual

of Patent Examining Procedure ("MPEP") states the following:

> The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

See MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988, 78 U.S.P.Q.2d 1329,

1336 (Fed. Cir. 2006), and *KSR Int'l Co. v. Teleflex Inc.*, 82 U.S.P.Q.2d at 1396

(quoting Federal Circuit statement with approval) (emphasis added).

If a *prima facie* case of obviousness is not established, the Applicants are

under no obligation to submit evidence of nonobviousness:

> The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. **If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness**.

See MPEP at § 2142 (emphasis added).

Additionally, "[i]f the examiner is able to render a claim obvious simply by

saying it is so, neither the Board nor [the Federal Circuit] is capable of reviewing

that determination. ... If there is neither record evidence nor detailed examiner reasoning, the Board should not conclude that ... claims are obvious." *See In re Vaidyanathan*, Appeal 2009-1404 at pages 18-19 (Fed. Cir. May 19, 2010) (nonprecedential).

"[T]he Board cannot simply reach conclusions based on its own understanding or experience – or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to **some <u>concrete evidence</u> in the record in support of these findings**." *See In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (emphasis added).

With those principles in mind, the Applicants now turn to the claim rejections, in particular.

II. The Proposed Combination of Whitehill and Bajikar Does Not Render Claims 1-7, 9, 11-17, 19, 21-27, 29, 31 and 32 Unpatentable

The Applicant turns to the rejection of claims 1-7, 9, 11-17, 19, 21-27, 29 and 31-32 under 35 U.S.C. 103(a) as being unpatentable over Whitehill and Bajikar.

A. Rejection of Independent Claims 1, 11 and 21

With regard to the rejection of independent claim 1 under 103(a), the Applicant submits that the combination of Whitehill and Bajikar does not disclose or suggest "said determined configuration information facilitates seamless network

service to said network device without denial or disconnection from the hybrid

wired/wireless network," as recited in Applicant's claim 1.

A(1). Whitehill Does Not Disclose "Communicating said Determined Configuration Information to Said Network Device" or "said Determined Configuration Information Facilitates Seamless Network Service to Said Network Device without Denial or Disconnection from the Hybrid Wired/Wireless Network."

The Final Office Action (see pp. 2-3) states the following:

"Regarding claim 1, Whitehill discloses a method for providing location based configuration in a hybrid wired/wireless network, the method comprising:
- identifying a location of a network device (determining the geographic location of user nodes, seecol.3, lns.29-43; determine if node in in the secure range of the reporting fixed device, if not, perform location analysis, see AAA server in fig.7) within the hybrid wired/wireless network (fig. 1), the network device being movable within the hybrid wired/wireless network (mobile nodes, see 103 & 102 fig. 1);
- determining, outside of the network device, accessing configuration of the network device (determining, at AAA server, allowing access of the network if node is in the secure area, see AAA server fig.7; Note: granting or denying is interpreted as access configuration information), the accessing configuration corresponding to the determined location of the network device (the accessing configuration is related with the location of the mobile node, ie., if node is in the secure are, see fig.?); and - communicating the determined accessing of the network device for providing location based configuration of the network device ("authorization response and IAP response messages" are sent to the mobile node for initial access and authorization complete, see fig.7).
Whitehill discloses the accessing of network device, but does not explicitly disclose "configuration information for the network device"."

The Examiner is referred to Applicant's above arguments (1A) and (1B) in the Summary of Examiner Interviews. To summarize, Whitehill has the following deficiencies:

(1A)   Whitehill's wireless router (102) or access points (101) are the controlling gateway for granting or denying network access to the mobile nodes (103) (the alleged "network device"). In this regard, Whitehill, at best, discloses sending the alleged "configuration information" to the wireless router (102) or access points (101), but not to the mobile nodes (103) (the alleged "network device"). In this regard, the Applicant maintains that Whitehill at least does not disclose or suggest Applicant's "**communicating said determined configuration information to said network device**," as recited in Applicant's claim 1 (a point the Examiner also concedes in the Final Office Action).

(1B)   Even assuming that Whitehill discloses sending the alleged "configuration information" to the mobile nodes (103) (the alleged "network device") (a point the Applicant does not concede), the Examiner's argument is still deficient. Applicant's claim 1 has been amended to recite "**said determined configuration information facilitates seamless network service to said network device without denial or disconnection from the hybrid wired/wireless network**". In other words, Applicant's received "determined configuration information" facilitates or enables Applicant's network device to

access the network seamlessly (without denial or disconnection from network service) when moving from one location to another location.

Whitehill, instead, discloses a method (i.e., authentication process) for **granting or denying** a network device **access to the network**, based on the determined location information of the network device. In other words, if Whitehill's authentication process denies the mobile nodes (103) (the alleged "network device"), Whitehill's mobile nodes (103) will not be granted access and thus will be disconnected from the network. In this regard, Whitehill also does not disclose or suggest the alleged "seamless network service to said network device **without denial or disconnection from the hybrid wired/wireless network**".

A(2). Bajikar Does Not Overcome Whithill's Above Deficiency (1B)

The Examiner (see Final Office Action, p. 3) relies upon Bajikar to disclose Whitehill's deficiency (1A), and states:

> "However, Bajikar discloses "configuration information for the network device (each security zone is determined in accordance with the current location or position of mobile device. Associated with each security zone is an access protocol which configures access control parameters to mobile device which will determine whether a screen saver locks and re-authentication as sharing rules, automatic roaming, and they type of external access request that may be accepted, see ¶.16).

> Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to apply the method of determining configuration information for the network device as taught by Bajikar into the system of Whitehill, so that it provides a

way of determining whether a screen saver locks, re-authenticate, automatic roaming, external access request, etc. based on the location information (Bajikar, see ¶.16)."

The Examiner is referred to Applicant's above arguments (1C) in the Summary of Examiner's Interview. To summarize, Bajikar is still deficient as follows:

(1C) Applicant's claim 1 also further distinguishes from Bajikar. Bajikar is relied upon by the Examiner to allegedly disclose the "configuration information for said network device" (Whitehill's deficiency (1A)). The Examiner equates Bajikar's associating an access protocol with the current location of the mobile device to Applicant's "configuration information for said network device".

Nevertheless, Bajikar is still deficient. More specifically, Bajikar's access protocol configures whether to lock the screen saver of the mobile device (the alleged "network device"). Bajikar further discloses that the access protocol requires the mobile device (the alleged "network device") to use a password to re-autheticate for access, or to reset the device to roaming. In other words, Bajikar, discloses controlling the network access rights of the mobile device (the alleged "network device") with the access protocol (the alleged "configuration information"). In this regard, Bajikar does not disclose or suggest "facilitates seamless network service to the network device **without denial or disconnection**

from the hybrid wired/wireless network," as recited in Applicant's claim 1, and accordingly it does not overcome Whitehill's deficiency (1B).

Thus, the Examiner's argument that "*to apply the method of determining configuration information for the network device as taught by Bajikar into the system of Whitehill, so that it provides a way of determining whether a screen saver locks, re-authenticate, automatic roaming, external access request, etc. based on the location information (Bajikar, see ¶.16)*" is not an articulated reasoning, since the combination of Whitehill and Bajikar still does not disclose or suggest "**said determined configuration information facilitates seamless network service to said network device without denial or disconnection from the hybrid wired/wireless network**," as recited in Applicant's claim 1. Therefore, Applicant's claim 1 is submitted to be allowable.

Applicant's claims 11 and 21 are similar in many respects to claim 1, and are submitted to be allowable for the same reasons stated in claim 1 above. Accordingly, the Applicant respectfully requests that the rejection of claims 1, 11 and 21 under 35 U.S.C. § 103(a) be withdrawn.

B.   Dependent Claims 2-7, 9, 12-17, 19, 22-27, 29 and 31-32

Dependent claims 2-7, 9, 12-17, 19, 22-27, 29 and 31-32 depend directly or indirectly from independent claims 1, 11 and 21, respectively. Consequently,

claims 2-7, 9, 12-17, 19, 22-27, 29 and 31-32 are submitted to be allowable at

least for the reasons stated above with regard to claim 1.

B(1) Dependent Claims 6, 16 and 26

The Final Office Action (see p. 4) states the following:

"Regarding claim 6, Whitehill discloses, "the RF channel is at least
one of a broadcast channel and a setup channel (neighbor
discovery, see fig.7)."

The Examiner is referred to Applicant's above argument (2) in the Summary

of Examiner's Interview:

(2)   Regarding dependent claim 6, the Final Office Action relies upon

Whitehill's Figs. 1 and 7, and equates Whitehill's wireless router utilizing RF

channels to discover neighbor (node) to Applicant's "RF channel" being "a setup

channel".

Applicant's claim 6 has been amended and now recites "said RF channel is

both a **broadcast channel** and a setup channel". Whitehall fails to disclose that

the wireless routers utilize a "**broadcast channel**" as the alleged "setup channel".

Therefore, Applicant's dependent claim 6 is submitted to be allowable. Dependent

claims 16 and 26 are allowable for the same reason as stated above regarding

claim 6.

III. The Proposed Combination of Whitehill, Bajikar and White Does Not Render Claims 8, 18 and 28 Unpatentable

The Final Office Action (see p. 6) states the following:

"Regarding claims 8, 18, and 28, Whitehill discloses the maintaining the geographic location of the mobile node, but Whitehill and Bajikar do not explicitly disclose, "dynamically updating the network device with the communicated information whenever it is determined that at least one network setting corresponding to a location of the network device has changed."

However, White discloses "dynamically updating the network device with the communicated information whenever it is determined that at least one network setting corresponding to a location of the network device has changed (col.6, lns.5-28)."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to apply the method of dynamically updating the network device as taught by White into the system of Whitehill and Bajikar, so that it provides a way of approximating the speed of the destination node (White, see col.6, lns.5-1 0)."

Dependent claims 8, 18 and 28 depend directly or indirectly from independent claims 1, 11 and 21, respectively. Consequently, claims 8, 18 and 28 are submitted to be allowable at least for the reasons stated above with regard to claim 1. In addition, the Examiner is referred to Applicant's above argument (3) in the Summary of Examiner's Interview:

(3) Regarding dependent claim 8, it recites "dynamically updating the network device with the communicated information (i e, configuration of the network device in claim 1) whenever it is determined that at least one network setting corresponding to a location of said network device has changed". In other

words, Applicant's "communicated information" updates only corresponds to the determined location, but cannot be equated to the "determined location".

The Final Office Action, however, seems to have incorrectly equated White's (col. 6, II. 5-28) sending the location updates to the network device to Applicant's communicated information (i.e., configuration of the network device). In other words, the Final Office Action seems to have incorrectly interpreted Applicant's "configuration information" as a "device location". In this regard, White does not disclose or suggest the limitations as recited in Applicant's dependent claim 8, and Applicant's claim 8 should be allowable. Dependent claims 18 and 28 are allowable for the same reason stated above regarding claim 8.

IV.   The Proposed Combination of Whitehill, Bajikar and Augat Does Not Render Claims 10, 20 and 30 Unpatentable

The Final Office Action (see p. 7) states the following:

"Regarding claims 10,20, 30, Whitehill discloses, "triangulating locations of network routing devices named in the received routing information to determine the location of the network device (col.5, Ins.45-51)", but Whitehill and Bajikar are silent on "sending a ping message to at least one network routing device; receiving routing information associated with the ping message."
However, Augart discloses "sending a ping message (a probe packet, see 150 fig.2 and col.4, In.56-67) to at least one network routing device; receiving routing information associated with the ping message (TTL values, see col.4, In.56-67)."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to apply the probe packet as taught by Augart into the hybrid network of Whitehill and 8ajikar in

order to determine the maximum additional number of hops using Time-To-Live (TTL) field within the probe packet for routing purpose (Augart, see col.4, ln.56-67).

Dependent claims 10, 20 and 30 depend directly or indirectly from independent claims 1, 11 and 21, respectively. Consequently, claims 10, 20 and 30 are submitted to be allowable at least for the reasons stated above with regard to claim 1. In addition, the Examiner is referred to Applicant's above argument (4) in the Summary of Examiner's Interview:

(4) Regarding dependent claim 10, Applicant's "ping message" is a known term of art. More specifically, the Examiner is referred to Newton's Telecom Dictionary (24th Edition) pp. 719-720, which defines a "ping" as an "echo signal response" of a packet sent from a (source) computer over a network to a computer with a specified destination IP. In other words, Applicant's "ping message" is an "echo signal response" (over the network) from a destination network routing device with a specified IP address.

The Final Office Action relies upon Augat (col. 4, ll. 56-67), and equates Augat's Time to Live (TTL) field within the probe packet for routing to Applicant's "ping message". Augat, however, discloses that the TTL field in the probe packet is a value which records the number of times the packet has "hopped" over an IP address to reach the destination. In other words, Augat's probe packet with the TTL field records the history or the routing path the packet has traversed over the

network, instead of being the alleged "ping message" which bounces back as an "echo signal response" from the (destination) routing network device. In this regard, Augat at least does not disclose or suggest Applicant's "ping message", and Applicant's dependent claim 10 should be allowable. Dependent claims 20 and 30 are allowable for the same reasons as stated above regarding claim 10.

Furthermore, the Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of claims 1-32, should such a need arise.

CONCLUSION

Based on at least the foregoing, the Applicant believes that claims 1-32 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and requests that the Examiner telephone the undersigned Patent Agent at (312) 775-8093.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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